

## Rotary Dampers high-torque range (180°)

### WRD 0607 - 1207

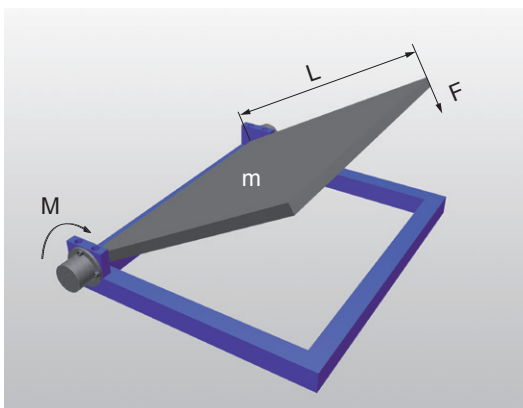


#### Controlled damping of rotary movements

**High torques** up to 700 Nm  
**Damping** Both sides, clockwise and counter-clockwise

Adjustable from WRD 2515  
 Fixed setting up to WRD 2010  
 Material Aluminium, steel  
 Temperature range -10°C - +60°C (14°F - +140°F)  
 RoHS compliant Directive 2002/95/EC  
**Applications** Damping of rotary movement in flaps, covers and lids

## CALCULATION



#### Example

$m = 50,0 \text{ kg}$   
 $L = 0,30 \text{ m}$

#### Formula & Calculation

$$M = g \times m \times L/2 = 73,58 \text{ Nm}$$

#### Selection

**WRD-H 6030R**

$F = 200,0 \text{ N}$   
 $L = 0,10 \text{ m}$

$$M = F \times L = 20 \text{ Nm}$$

**WRD-H 4025R**

#### LEGEND

m	(kg)	Mass	M	(Nm)	Torque
L	(m)	Lenght	g	(m/s <sup>2</sup> )	Accerelation due to gravity (9,81 m/s <sup>2</sup> )
F	(N)	Force			

Online calculation (imperial / metric) at [www.weforma.com](http://www.weforma.com)

## TORQUE

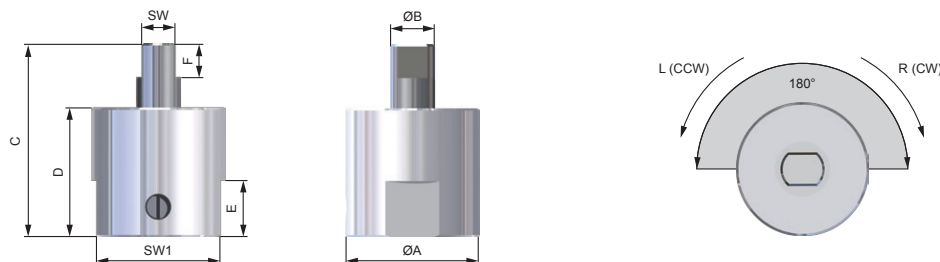
Clockwise	Anti-clockwise	Clockwise and anticlockwise	Torque Nm (in lbs)	Opening angle °	Weight g (oz)
WRD-H 0607-R	WRD-H 0607-L	WRD-H 0607-C	0,08 (0.71)	180	4 (0.14)
WRD-H 0805-R	WRD-H 0805-L	WRD-H 0805-C	0,2 (1.77)	180	5 (0.1)
WRD-H 1208-R	WRD-H 1208-L	WRD-H 1208-C	1,1 (9.74)	180	14 (0.49)
WRD-H 1610-R	WRD-H 1610-L	WRD-H 1610-C	2,6 (23.01)	180	24 (0.85)
WRD-H 2010-R	WRD-H 2010-L	WRD-H 2010-C	3,5 (30.98)	180	29 (1.02)
WRD-H 2515-R	WRD-H 2515-L	WRD-H 2515-C	10 (88.5)	180	81 (2.86)
WRD-H 3015-R	WRD-H 3015-L	WRD-H 3015-C	14 (123.9)	180	109 (3.84)
WRD-H 4025-R	WRD-H 4025-L	WRD-H 4025-C	40 (354.0)	180	354 (12.49)
WRD-H 6030-R	WRD-H 6030-L	WRD-H 6030-C	110 (973.6)	180	759 (26.78)
WRD-H 7550-R	WRD-H 7550-L	WRD-H 7550-C	250 (2213)	180	4665 (164.55)
WRD-H 9565-R	WRD-H 9565-L	WRD-H 9565-C	500 (4425)	180	10155 (358.21)
WRD-H 12070-R	WRD-H 12070-L	WRD-H 12070-C	700 (6196)	180	18560 (654.68)

Idle: At the beginning of the deceleration max. 5°

## WRD-H 0607 / 0805 / 1208 / 1610 / 2010



R (CW)*	L (CCW)*	C*	M* (Nm / in lbs)	Reverse running	Material
WRD-H 0607-R	WRD-H 0607-L	WRD-H 0607-C	0,08 (0.71)	0,03 (0.27)	Aluminum / Steel
WRD-H 0805-R	WRD-H 0805-L	WRD-H 0805-C	0,2 (1.77)	0,08 (0.71)	
WRD-H 1208-R	WRD-H 1208-L	WRD-H 1208-C	1,1 (9.74)	0,25 (2.21)	
WRD-H 1610-R	WRD-H 1610-L	WRD-H 1610-C	2,6 (23.01)	0,2 (1.77)	
WRD-H 2010-R	WRD-H 2010-L	WRD-H 2010-C	3,5 (30.98)	0,5 (4.43)	

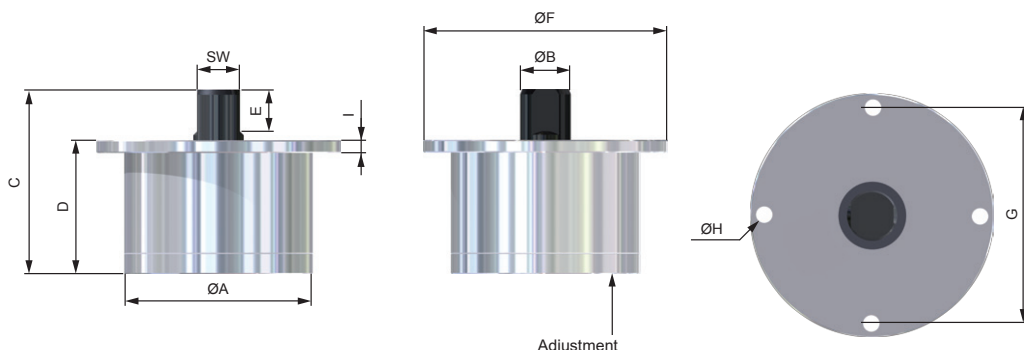


	ØA	ØB	C	D	E	F	SW	SW1
WRD-H 0607	9 (0.35)	3 f7 (0.12)	18,7 (0.74)	13,0 (0.51)	4 (0.16)	2 (0.08)	2,6 (0.10)	8 (0.31)
WRD-H 0805	12 (0.47)	4 f7 (0.16)	17,2 (0.68)	11,5 (0.45)	5 (0.2)	3 (0.12)	3 (0.12)	11 (0.43)
WRD-H 1208	18 (0.71)	5 f7 (0.2)	21 (0.83)	15,5 (0.61)	5 (0.2)	3 (0.12)	4 (0.16)	15 (0.59)
WRD-H 1610	21 (0.83)	6 f7 (0.24)	26 (1.02)	19 (0.75)	10 (0.39)	6 (0.24)	4 (0.16)	18 (0.71)
WRD-H 2010	24 (0.94)	6 f7 (0.24)	25 (0.98)	18 (0.71)	10 (0.39)	6 (0.24)	4 (0.16)	22 (0.87)

## WRD-H 2515 / 3015 / 4025 / 6030



R (CW)*	L (CCW)*	C*	M* max (Nm / in lbs)	M* min (Nm / in lbs)	Reverse running	Material
WRD-H 2515-R	WRD-H 2515-L	WRD-H 2515-C	10 (88.5)	1,5 (13.28)	0,8 (7.08)	Aluminum / Steel
WRD-H 3015-R	WRD-H 3015-L	WRD-H 3015-C	14 (123.9)	2 (17.7)	0,7 (6.2)	
WRD-H 4025-R	WRD-H 4025-L	WRD-H 4025-C	40 (354.0)	12,5 (110.63)	2,5 (22.13)	
WRD-H 6030-R	WRD-H 6030-L	WRD-H 6030-C	110 (973.6)	25 (221.27)	7,5 (66.38)	



	ØA	ØB	C	D	E	ØF	G	ØH	SW	I
WRD-H 2515	32 (1.26)	7 f7 (0.28)	39,8 (1.57)	30 (1.18)	9 (0.35)	47 (1.85)	40 (1.57)	4,1 (0.16)	5 (0.2)	5 (0.2)
WRD-H 3015	38 (1.5)	8 f7 (0.31)	39 (1.54)	29 (1.14)	9 (0.35)	56 (2.2)	47,5 (1.87)	5,1 (0.2)	6 (0.24)	5 (0.2)
WRD-H 4025	55 (2.17)	10 f7 (0.39)	59 (2.32)	45 (1.77)	14 (0.55)	77 (3.03)	66 (2.6)	6,6 (0.26)	8 (0.31)	10 (0.39)
WRD-H 6030	75 (2.95)	20 f7 (0.79)	73 (2.87)	53 (2.09)	16,6 (0.65)	97 (3.82)	86 (3.39)	6,6 (0.26)	17 (0.67)	5 (0.2)

\* R (CW): Clockwise / L (CCW): Anti-clockwise / C: Clockwise and anti-clockwise / M: Torque

# WRD-H

## WRD-H 7550 / 9565 / 12070

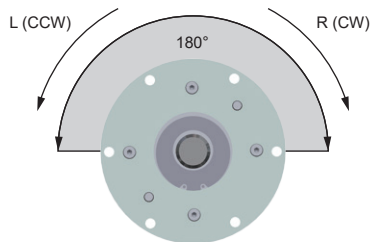
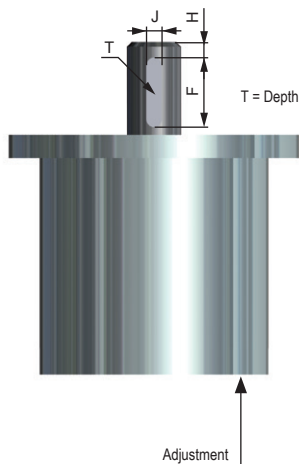
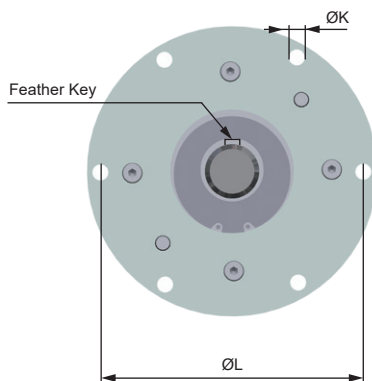
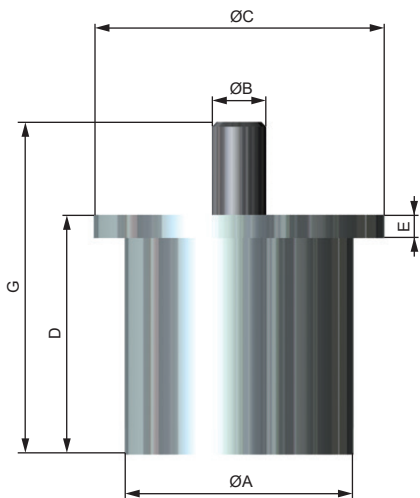


R (CW)*	L (CCW)*	C*	M* max (Nm / in lbs)	M* min (Nm / in lbs)	M* Reverse Running L/R (Nm / in lbs)	Material*
WRD-H 7550-R	WRD-H 7550-L	WRD-H 7550-C	250 (2213)	65 (575)	30 (266)	Steel
WRD-H 9565-R	WRD-H 9565-L	WRD-H 9565-C	500 (4425)	140 (1239)	110 (974)	
WRD-H 12070-R	WRD-H 12070-L	WRD-H 12070-C	700 (6196)	270 (2390)	250 (2213)	

	ØA	ØB	ØC	D	E	F	G	H	J	T	ØK	ØL
WRD-H 7550	90 (3.54)	25 f7 (0.98)	130 (5.12)	100 (3.94)	10 (0.39)	25 (0.98)	140 (5.51)	6,4 (0.25)	8 (0.31)	4 (0.16)	8,2 (0.32)	110 (4.33)
WRD-H 9565	120 (4.72)	30 f7 (1.18)	155 (6.1)	125 (4.92)	15 (0.59)	32 (1.26)	175 (6.89)	9 (0.35)	10 (0.39)	4 (0.16)	8,2 (0.32)	137,5 (5.41)
WRD-H 12070	148 (5.83)	35 f7 (1.38)	188 (7.4)	155 (6.1)	15 (0.59)	45 (1.77)	215 (8.46)	10 (0.39)	10 (0.39)	5 (0.2)	10,5 (0.41)	168 (6.61)

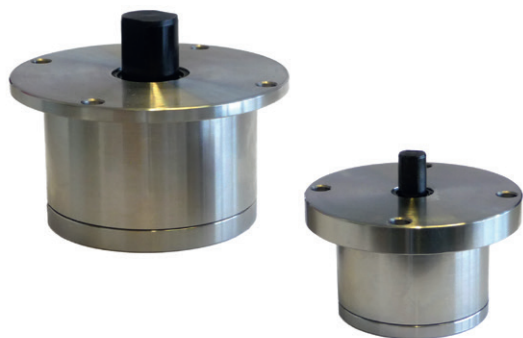
### FEATHER KEY\*

	M	N	P
WRD-H 7550	25 (0.98)	8 (0.31)	7 (0.28)
WRD-H 9565	32 (1.26)	10 (0.39)	8 (0.31)
WRD-H 12070	45 (1.77)	10 (0.39)	8 (0.31)



\* R (CW): Clockwise  
 L (CCW): Anti-clockwise  
 C: Clockwise and anti-clockwise  
 M: Torque  
 Material

# WRD-H-VA



<b>Material</b>	<b>Housing Stainless steel V2A / DIN 1.4305 / AISI 303</b>
<b>Piston rod</b>	<b>DIN 1.4125 / AISI 440C</b>
Corrosion resistance in wet environments	
Temperature	-10°C - +60°C (14°F - +140°F)
Special oils	Food-grade according to USDA-H1
<b>Applications</b>	Food industry, Outside machinery, Medical technology

Clockwise	Counter-clockwise	Clockwise and counter-clockwise	Torque Nm (in lbs)	Weight kg (lbs)
WRD-H 0607-R-VA	WRD-H 0607-L-VA	WRD-H 0607-C-VA	0,08 (0.71)	0,007 (0.015)
WRD-H 0805-R-VA	WRD-H 0805-L-VA	WRD-H 0805-C-VA	0,2 (1.77)	0,009 (0.02)
WRD-H 1208-R-VA	WRD-H 1208-L-VA	WRD-H 1208-C-VA	1,1 (9.74)	0,025 (0.055)
WRD-H 1610-R-VA	WRD-H 1610-L-VA	WRD-H 1610-C-VA	2,6 (23.01)	0,041 (0.09)
WRD-H 2010-R-VA	WRD-H 2010-L-VA	WRD-H 2010-C-VA	3,5 (30.98)	0,049 (0.108)
WRD-H 2515-R-VA	WRD-H 2515-L-VA	WRD-H 2515-C-VA	10 (88.5)	0,19 (0.419)
WRD-H 3015-R-VA	WRD-H 3015-L-VA	WRD-H 3015-C-VA	14 (123.9)	0,257 (0.57)
WRD-H 4025-R-VA	WRD-H 4025-L-VA	WRD-H 4025-C-VA	40 (354.0)	0,863 (1.9)
WRD-H 6030-R-VA	WRD-H 6030-L-VA	WRD-H 6030-C-VA	110 (973.6)	1,58 (3.48)
WRD-H 7550-R-VA	WRD-H 7550-L-VA	WRD-H 7550-C-VA	250 (2213)	4,67 (10.3)
WRD-H 9565-R-VA	WRD-H 9565-L-VA	WRD-H 9565-C-VA	500 (4425)	10,22 (22.54)
WRD-H 12070-R-VA	WRD-H 12070-L-VA	WRD-H 12070-C-VA	700 (6196)	18,61 (41.04)

Idle: At the beginning of the deceleration max. 5°

